

## United States of America

# FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

LONG NINE, INC.

P.O. BOX 460

SPRINGFIELD IL 62705

Facility Id: 38348

Call Sign: WMAY

License File Number: BZ-20111207AOF

Com Name

Supervisory Engineer

Audio Division

Media Bureau

Grant Date: JUN 6

This license expires 3:00 a.m. local time, December 01, 2012.

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Hours of Operation: Unlimited

Average hours of sunrise and sunset: Local Standard Time (Non-Advanced)

| Jan. | 7:15 | AM | 5:00 | PM | Jul. | 4:45 | AM | 7:30 | PM |
|------|------|----|------|----|------|------|----|------|----|
| Feb. | 6:45 | AM | 5:30 | PM | Aug. | 5:15 | AM | 7:00 | PM |
| Mar. | 6:15 | MA | 6:00 | PM | Sep. | 5:45 | AM | 6:15 | PM |
| Apr. | 5:15 | MA | 6:30 | PM | Oct. | 6:15 | AM | 5:15 | PM |
| May  | 4:45 | MA | 7:00 | PM | Nov. | 6:45 | AM | 4:45 | PM |
| Jun. | 4:30 | MA | 7:30 | PM | Dec. | 7:15 | AM | 4:30 | PM |

Callsign: WMAY License No.: BZ-20111207AOF

Name of Licensee: LONG NINE, INC.

Station Location: SPRINGFIELD, IL

Frequency (kHz): 970

Station Class: B

#### Antenna Coordinates:

Day

Latitude: N 39 Deg 51 Min 42 Sec Longitude: W 89 Deg 32 Min 32 Sec

Night

Latitude: N 39 Deg 51 Min 42 Sec Longitude: W 89 Deg 32 Min 32 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

73.1670 Of the Commission's Rules.

Nominal Power (kW): Day: 1.0 Night: 0.50

Antenna Input Power (kW): Day: 1.08 Night: 0.54

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 4.56 Night: 3.22

Resistance (ohms): Day: 52 Night: 52

Antenna Registration Number(s):

Day:

Tower No. ASRN Overall Height (m)

2 1009045

3 1009046

4 1009047

Night:

Tower No. ASRN Overall Height (m)

1 1009044

2 1009045

3 1009046

4 1009047

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 313.82 Night: 246.23

Standard RMS (mV/m/km):

Augmented RMS (mV/m/km): Day:334.02 Night:259.17

Q Factor: Day: Night:

#### Theoretical Parameters:

## Day Directional Antenna:

| Tower<br>No. | Field<br>Ratio | Phasing<br>(Deg.) | Spacing (Deg.) | Orientation (Deg.) | Tower Ref<br>Switch * | Height (Deg.) |
|--------------|----------------|-------------------|----------------|--------------------|-----------------------|---------------|
| 2            | 1.1800         | 110.500           | 0.0000         | 0.000              | 0                     | 90.0          |
| 3            | 1.0000         | 0.000             | 110.0000       | 212.000            | 0                     | 90.0          |
| 4            | 0.2880         | -112.200          | 220.0000       | 212.000            | 0                     | 90.0          |

<sup>\*</sup> Tower Reference Switch

## Augmentation Parameters:

| Aug<br>No. | Central<br>Azimuth<br>(Deg. T) | Span<br>(Deg.) | Radiation at Central Azimuth (mV/m @ 1 km) |
|------------|--------------------------------|----------------|--|
| 1          | 2.0                            | 40.0           | 112.65                                     |
| 2          | 31.0                           | 58.0           | 133.58                                     |
| 3          | 65.0                           | 34.0           | 112.65                                     |
| 4          | 82.0                           | 34.0           | 111.04                                     |
| 5          | 102.0                          | 32.0           | 133.58                                     |
| 6          | 118.0                          | 32.0           | 185.07                                     |
| 7          | 191.5                          | 41.0           | 530.04                                     |
| 8          | 212.0                          | 40.4           | 530.04                                     |
| 9          | 232.2                          | 40.4           | 530.04                                     |
| 10         | 252.5                          | 40.6           | 498.29                                     |
| 11         | 283.7                          | 62.3           | 353.67                                     |
| 12         | 315.0                          | 54.0           | 144.84                                     |
| 13         | 342.0                          | 40.0           | 111.04                                     |
|            |                                |                |  |

## Theoretical Parameters:

## Night Directional Antenna:

| Tower<br>No. | Field<br>Ratio | Phasing (Deg.) | Spacing (Deg.) | Orientation (Deg.) | Tower Ref<br>Switch * | Height (Deg.) |
|--------------|----------------|----------------|----------------|--------------------|-----------------------|---------------|
| 1            | 1.0000         | 61.000         | 0.0000         | 0.000              | 0                     | 90.0          |
| 2            | 3.0000         | -100.000       | 110.0000       | 212.000            | 0                     | 90.0          |
| 3            | 3.0000         | 100.000        | 220.0000       | 212.000            | 0                     | 90.0          |

<sup>0 =</sup> Spacing and orientation from reference tower

<sup>1 =</sup> Spacing and orientation from previous tower

Theoretical Parameters:

## Night Directional Antenna:

| Tower | Field<br>Ratio | Phasing (Deq.) | Spacing (Deg.) | Orientation (Deg.) | Tower Ref<br>Switch * |      |
|-------|----------------|----------------|----------------|--------------------|-----------------------|------|
| 4     | 1.0000         | , ,            | 330.0000       | 212.000            | 0                     | 90.0 |

<sup>\*</sup> Tower Reference Switch

0 = Spacing and orientation from reference tower

## Augmentation Parameters:

| Aug<br>No. | Central<br>Azimuth<br>(Deg. T) | Span<br>(Deg.) | Radiation<br>at Central Azimuth<br>(mV/m @ 1 km) |
|------------|--------------------------------|----------------|--|
| 1          | 54.5                           | 21.0           | 206.29   |
| 2          | 83.5                           | 17.0           | 56.33  |
| 3          | 102.0                          | 16.0           | 24.14  |
| 4          | 110.0                          | 16.0           | 22.53  |
| 5          | 118.0                          | 16.0           | 24.14  |
| 6          | 131.5                          | 27.0           | 35.41  |
| 7          | 297.5                          | 35.0           | 28.97  |
| 8          | 315.0                          | 14.0           | 22.53  |
| 9          | 322.0                          | 14.0           | 25.75  |
| 10         | 336.0                          | 28.0           | 41.84  |

## Day Directional Operation:

| Twr. Phase |        | Antenna Monitor      |  |  |  |  |
|------------|--------|----------------------|--|--|--|--|
|            | (Deg.) | Sample Current Ratio |  |  |  |  |
| 2          | 112.3  | 1.292                |  |  |  |  |
| 3          | 0      | 1                    |  |  |  |  |
| 4          | -100.3 | 0.27                 |  |  |  |  |

## Night Directional Operation:

|   | Phase (Deg.) | Antenna Monitor<br>Sample Current Ratio |
|---|--------------|---|
| 1 | -46.5        | 0.315                                   |
| 2 | 156.8        | 0.994                                   |
| 3 | 0            | 1                                       |
| 4 | -159.2       | 0.348                                   |

<sup>1 =</sup> Spacing and orientation from previous tower

Antenna Monitor: POTOMAC INSTRUMENTS AM-19D(210)

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

## Day Operation:

| Radial Di<br>(Deg. T) | istance From Transmitter<br>(kM) | $\begin{array}{c} \text{Maximum Field Strength} \\ \text{(mV/m)} \end{array}$ |
|-----------------------|----------------------------------|---|
| 31                    | 2.57                             | 59.8  |
| 82                    | 4.35                             | 28.6  |
| 342                   | 4.02                             | 26  |

## Night Operation:

| Radial (Deg. T) | From Transmitter Maximum (kM) | Field Strength (mV/m) |
|-----------------|-------------------------------|-----------------------|
| 31              | 2.57                          | 102                   |
| 102             | 3.06                          | 6                     |
| 118             | 3.46                          | 7.2                   |
| 235             | 4.35                          | 121.3                 |
| 315             | 3.62                          | 6.8                   |

Special operating conditions or restrictions:

The permittee/licensee must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines. Special operating conditions or restrictions:

#### 2 Monitor Point Locations:

Direction of 31° true North. Proceed as follows: (1) North 0.2 mile to Route 54. (2) Northeast on Rte 54 to Garthard's Corner. (3) North across railroad tracks 1 mile to an intersection. (4) Proceed east 0.7 mile from intersection to fence post with yellow flag on North side of road. Monitor point is on North side of road near fence post with yellow metal flag.

Direction of 82° true North. From the transmitter, proceed in a northerly direction of 0.2 mile to Route 54. Turn right on Rte. 54 and proceed in a northeasterly direction 1.7 miles to the intersection immediately following the road sign marker for Barclay. Make a half-right turn and proceed 0.3 mile in a easterly direction from this intersection, to another intersection. From this point proceed south 0.5 mile to the next intersection. Proceed east from the intersection one mile to the next intersection. Pace off 100 feet in a southerly direction from the intersection. The monitor point is on the east side of the road opposite the second tree south of the intersection.

Direction of 102° true North. Proceed as follows: (1) North 0.20 mile to intersection just before reaching Hwy. 54. (2) East 0.25 mile to intersection (3) South 0.3 mile to "T" intersection. (4) East 1.7 mile to "T" intersection. (5) South 0.3 mile to farmhouse driveway. Monitor point is in the center of driveway even with east side of white farm house.

Direction of 118° true North. Follow same directions as for 102° monitoring point through items (4). Then (5) south 0.85 mile . Monitor point is in field 20 west of road fence running north and south and 20 feet north of field fence running east and west. There is a large tree about 50 feet south of point by road fence.

Direction of 235° true North. Proceed as follows: (1) North 0.25 miles to Hwy 54. (2) Southwest on Hwy. 54 3.5 miles to Bisselll Railroad siding. (3) South on dirt road 0.4 mile. Monitor point is in field 30 feet west of dirt road at a point 6 power line poles south of white school house on East side of road.

Direction of 315° true North. Follow same direction as for 31° monitoring point through items (3) then (4) west on Macaden Rd. 1.25 mile to "T" intersection (5) North 0.25 mile to intersection. (6) West on private dirt Rd. 0.5 mile. Monitor point is in the center of field road as road turns south in corner of Alfalfa field. Point is 30 feet south of large tree in fence row.

Direction of 342° true North. From the transmitter, proceed in a northerly direction 0.2 mile to Route 54. turn right on Rte. 54 and proceed in a northeasterly direction 0.3 mile to Gathard's Corner. At Gathard's Corner turn northward and proceed 2 miles to an intersection. Proceed westward from the intersection 0.9 mile. The monitor point is on the south side of the road approximately 10 feet west of a corrugated metal drainage culvert running parallel to the south side of the road.

Ground system consists of 120 equally spaced, buried, copper radials about the base of each tower, each 91.4 meters in length except where terminated by property boundaries or where intersecting radials are shortened and bonded to a transverse copper strap midway between adjacent towers.